



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

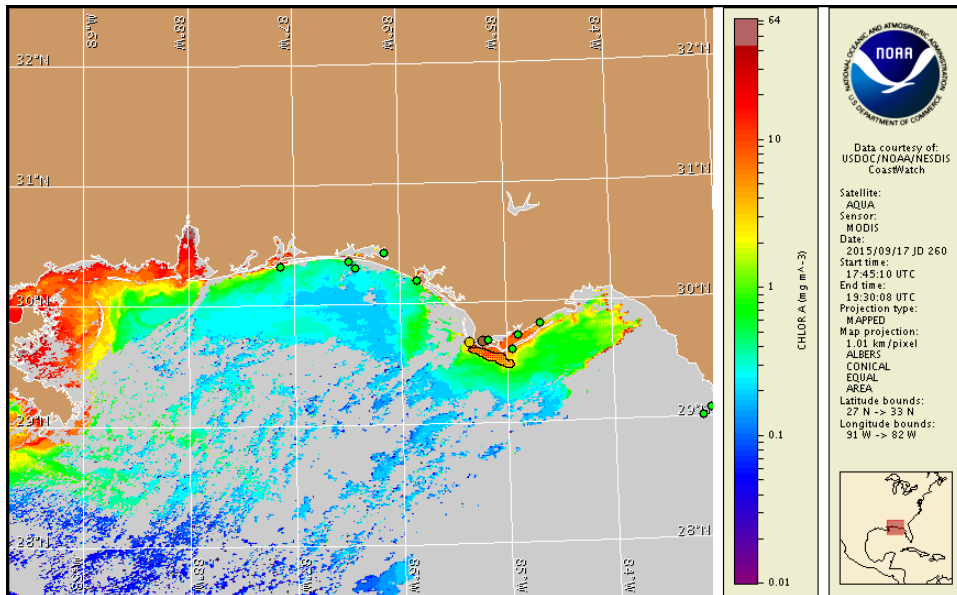
Friday, 18 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, September 17, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 8 to 17: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for along-shore northwest Florida Friday, September 18 to Monday, September 21 is listed below:

### County Region: Forecast (Duration)

**Gulf County:** Very Low (F-Sa), Moderate (Su), Low (M)

**Gulf County, east bay regions-Indian Lagoon area:** Low (F-Su), Very Low (M)

**All Other NWFL County Regions:** None expected (F-M)

**SWFL County Regions:** Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). No reports of respiratory irritation or fish kills have been reported over the past several days.

## Analysis

Recent samples collected over the past week from along- and offshore northwest Florida (Escambia to Taylor counties) indicated not present to 'low b' concentrations of *Karenia brevis*. In Gulf County, samples collected on 9/16 from Indian Lagoon, north of Neptune Street, indicated *K. brevis* concentrations increased to 'low a' from 'very low a' and samples collected at Cape San Blas show *K. brevis* concentrations increased to 'low b' from 'low a' samples collected on 9/7 (FWRI). In Franklin County, samples collected in St. Vincent Sound southeast of Thirteen Mile Road and in Apalachicola Bay at Gorrie Bridge, continue to indicate that *K. brevis* is not present (FWRI; 9/16). No reports of respiratory irritation or dead fish have been received from alongshore northwest Florida over the past day (FWRI, MML; 9/16).

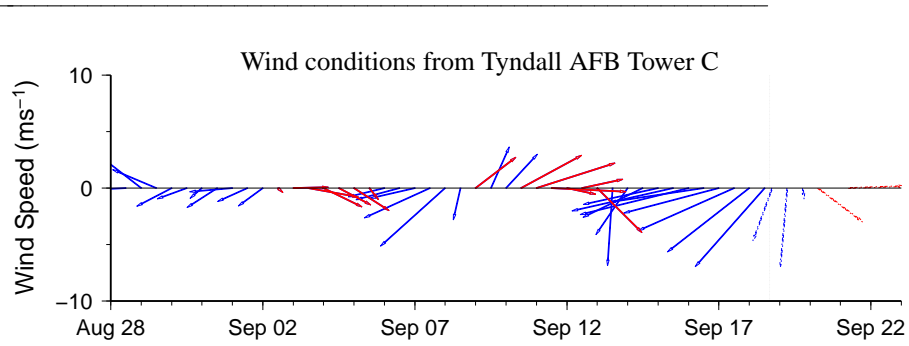
Recent ensemble imagery from 9/17 (MODIS Aqua, shown left) is partially obscured by clouds along- and offshore northwest Florida from Bay to Gulf counties, and from Wakulla to Taylor counties, limiting analysis. Patches of elevated chlorophyll (2 to 7  $\mu\text{g/L}$ ) with the optical characteristics of *K. brevis* are visible alongshore, and up to 10 miles offshore, northwest Florida in Gulf and Franklin counties where recent sampling indicated up to 'low b' concentrations of *K. brevis*. The recent imagery did not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis* from Escambia to Bay counties.

Northeast to north winds forecasted today through Saturday may promote transport of *K. brevis* concentrations west and may minimize the potential for intensification at the coast. West to northwest winds Sunday and Monday may promote transport of *K. brevis* concentrations south.

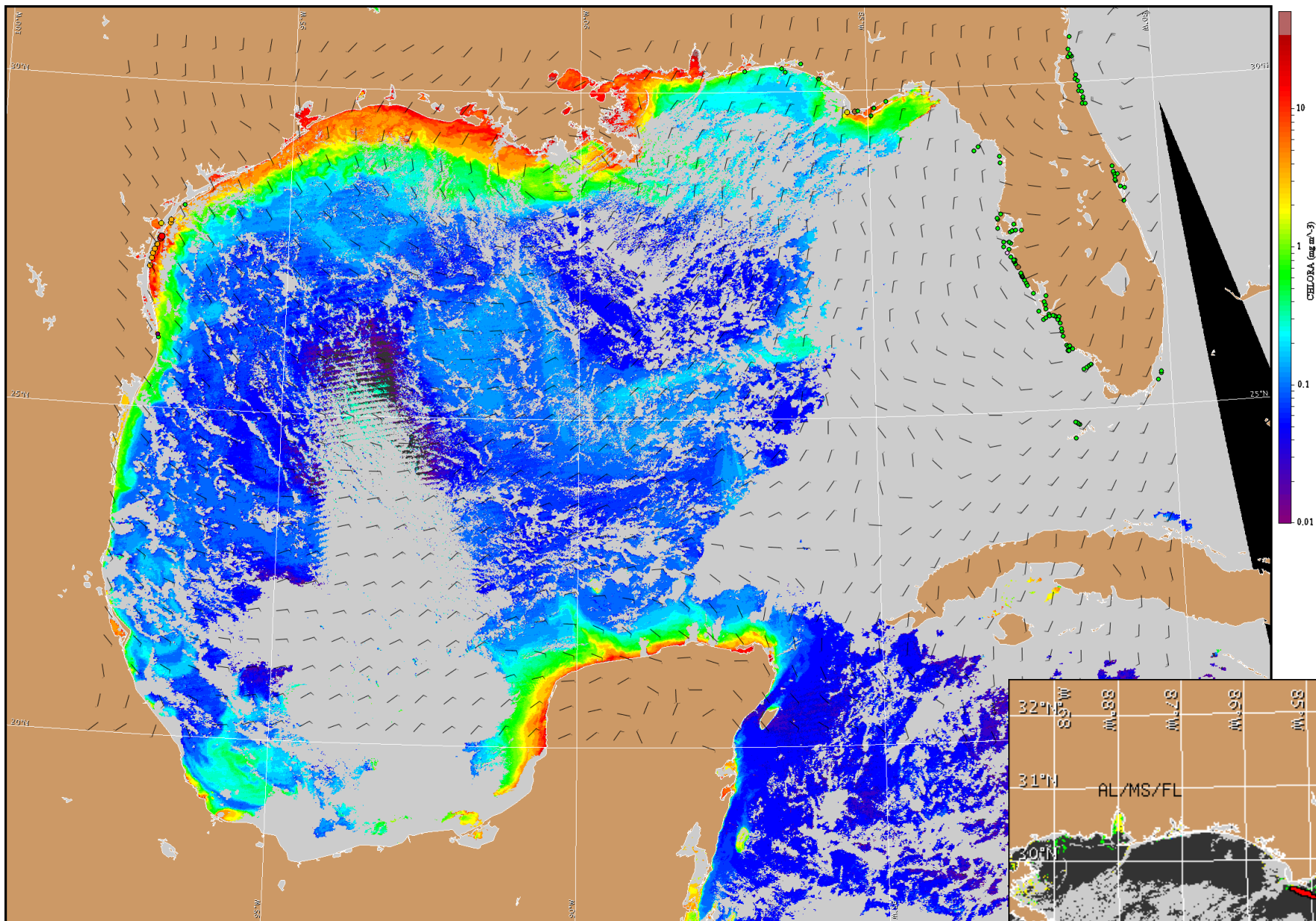
Lalime, Davis

## Wind Analysis

**Escambia to Taylor counties:** Northeast winds (10-20kn, 5-10m/s) today through Saturday. North winds (5-10kn, 3-5m/s) Saturday night. West winds (5-10kn) Sunday and Monday with northwest winds (5-10kn) in the evenings.

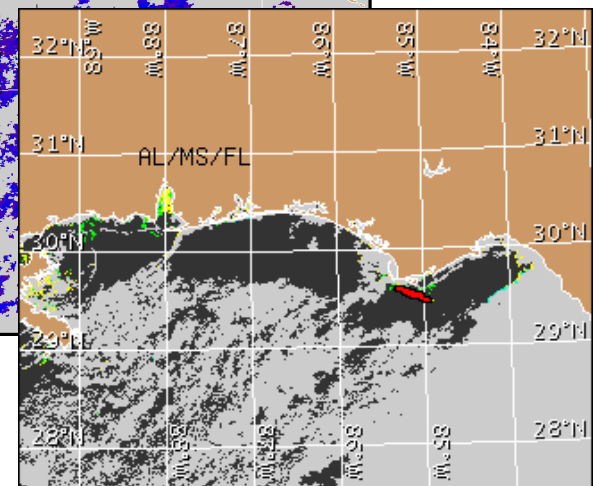


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for September 19, 2015 06Z with points representing cell concentration sampling data from September 8 to 17: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).